

FUNCTIONAL EXERCISE FOR OLDER ADULTS

Presented by Jeanne F. Nichols, PhD, FACSM
School of Exercise & Nutritional Sciences
San Diego State University

Suggested Equipment:

Sit-disks.

Stability balls, with bases for more stability.

4" foam pads for balance exercises (inexpensive at UFO fabric store in National City).

Resistance bands with various degrees of tension.

Paper plates (very useful and very inexpensive!).

Flat rubber 'dots' for gait exercises.

Medicine balls – suggest 3, 5, 8, 10 lb.

Hand weights/dumbbells – suggest 2, 3, 5, 8 lb.

Soft squeeze balls for hand and finger exercises.

Class Components and Sample Exercises

45-60 minutes, 2-3 d/wk; supplement with home activities, including walking or other aerobic exercise.

- ❖ **5 minute warm-up:** Slow, dynamic movements using large muscle groups of the lower body (do first) and upper body, moving through full range of motion. Use music preferred by class members.
 - Sample Exercises. Walking with various arm movements; Play musical dots: place tape marks or flat rubber disks around floor. When music stops, go to a dot. Instructor continues to remove a dot until only a few are left. If seated in chair, do toe tapping; heel lifts; spell ABCs with one foot then the other; leg lifts, knees bent; hip rotations
- ❖ **5-10 minutes of trunk stabilization exercises (hereafter called 'Core' exercises:** Core- emphasis is placed on training the abdominal, low back, and gluteal (buttocks) muscles. First teach participants to find neutral spine, and then introduce exercises starting with simple pelvic tilts and progressing to more advanced abdominal exercises. Stability balls are perfect for core training.
 - Sample Exercises. Kegel exercise for pelvic floor muscles; 'belly-button squeeze' exercise for abdominal control; pelvic tilts; hip lifts from chair; various stability ball exercises for more advanced participants.
- ❖ **10 -12 minutes of balance training:** static and dynamic; progressing from single plane balance (ex. standing with arms by side while lifting knee) to multiple plane balance (ex. lifting one knee while rotating the torso or moving the arms). To further challenge balance, use foam pads, half foam rollers, or sit-disks to create an unstable surface, either

while standing or sitting in a chair. Some exercises can be performed with the eyes closed.

- Sample Exercises. Single foot and tandem stand; eyes open and closed; tandem walk; increase balance challenge by introducing an unstable surface, for example, using foam pads for static stands and step-ups and step-downs.

- ❖ **10 - 13 minutes of resistance (strength) training:** Use body weight, hand weights/dumbbells, resistance bands, medicine balls, etc. Work in the range of approximately 8-12 repetitions (reps) per exercise. Follow each resistance exercise with a stretch of that muscle group.
 - Sample Exercises. Perform wall squats; progress to chair assisted, then non-assisted; technique is critical to prevent knee or back pain). Add an upper body exercise, such as bicep curl while squatting. Perform lateral movements such as lunges. From chair, use resistance bands for leg presses and various arm exercises; use medicine balls for arms and shoulders; perform chair rises assisted or unassisted.

- ❖ **5- 10 minutes of gait/ambulation activity:** Emphasis on mobility, proper gait mechanics and posture, and aerobic conditioning. Can be done as continuation of warm-up or later in the class, depending on emphasis for that day.
 - Sample Exercises. Try setting up obstacle courses to challenge the participants' ability to quickly change direction, step over obstacles, etc. Add music or other sounds to further challenge their ability to deal with environmental 'hazards'. Work on bench stepping in all directions. Teach participants various gait patterns such as cross-over step.

- ❖ **5-8 minutes of relaxation or similar exercise.** Include some stretching for muscles not already stretched during class. Be creative: use visualization techniques.